

THE MECHANICAL UNIVERSE

Video 41 - The Michelson-Morley Experiment

Name: _____

Class: _____

1. What was the Michelson-Morley experiment designed to do?
2. When was the Michelson-Morley experiment done?
3. What was the ether?
4. What does the speed of a wave depend on?
5. How many light beams are used in Michelson's interferometer?
6. What sort of problems did Michelson have with his first interferometer?
7. How many times more sensitive was Michelson's second interferometer?
8. What did the new interferometer float on?
9. What was the surprising outcome of the Michelson-Morley experiment?
10. What were the implications of the experiment?
11. What is the principle behind relativity?
12. Who became the first American to win the Nobel Prize?
13. Did Einstein base his Theory of Relativity on the Michelson-Morley experiment?